

# **Shelter In Place Lessons Learned**

#### **Richmond Refinery Look Back**



#### **SIP Event and Purpose of Look-back**

#### SIP Event

- On 1/15/2007 a SIP event occurred at the Richmond Refinery in response to the activation of the of our internal Alert System, due to a fire the Crude Unit
- March Safety Topic of the Month was a request for feedback from the refinery workforce

#### **Purpose of Look-back**

- Evaluate effectiveness and compliance with our Shelter in Place Procedures
- Identify key findings/Gaps and communicate with the Refinery Workforce



- Know your emergency response plan
  - Review and understand you SIP requirements, your primary and secondary evacuation sites
  - Review your plan and assure you have all the right tools and training
  - Know how to isolate your building
    - Review RI 480

http://www.ric841.chevron.net/referenc/REF\_INST/RI -New/ri-400/480txt.pdf

**EPA** 



#### **Process**

- Conducted a critique with the Management On Call Team
- Conducted a critique with the Emergency response Team
- Collected and reviewed comments from employees and contractors
- Collected comments from the Joint Health and Safety Committee
- Collected comments from adjacent Chevron facilities
- Identified key findings and improvements
- Developed a Look-Back and Shared as a Safety Topic of the Month



- Shelter In Place was not lifted/reduced in a timely manner therefore:
  - Personnel left SIP locations before the All Clear was sounded
- Improvement:
  - All workforce must follow SIP directions for the duration of an incident
- Miscommunication between I/C and Management 1 on the size and area of the Shelter In Place
  - People were able to go through gate 53 into the parking lot and through the turnstile into the refinery grounds during the SIP
  - People were let through the Main Gate.
  - Trucks were being allowed through 31 gate, during at least part of the SIP.
- Improvement :
  - Management #1 and Incident Commander will discuss the Extent of each Shelter in Place early in the incident



- Refinery Wide Drills
  - Need to hold more Refinery wide and local Evacuation and SIP Drills
- Improvement :
  - Updated Refinery Instruction #465 attached ( Please review the schedule for both Operating and non Operating areas, Non operating areas can choose to participate in the annual SIP drill as their local drill.
    - http://www.ric841.chevron.net/referenc/REF\_IN ST/RI-New/ri-400/ri-465.pdf



- Communication On-Site
  - Assure updates to the refinery are made at least every 30 minutes
- ■Improvement :
  - Use the Refinery Intercom
  - Use Refinery information line 2-4181
  - ► Training will be conducted for On Call personnel on the use of the new Refinery Information line (in service November 1, 2007)
- Communication Off-Site
  - Assure required communications are made in a timely manner
- Improvement :
  - Notification to the County using the Community Warning system
  - Early notification to the Chevron Emergency Information



- Unable to hear the Refinery Siren in the #1 Power House area
- Improvement:
  - Completed a comprehensive review of the entire Refinery Alert System
    - Replaced Speaker near #1 Power
    - Replaced another 40-50 Speakers throughout the Refinery



# **Recap of Recommendations**

#### **Action Plan**

- Updated Drill Procedure (RI 465)
- Conducted Refinery Wide Alert System review and made needed repairs/improvements
- Improved Communication with the County, ETC, Castro Loading racks, the Richmond Lubes Plant and the Chevron Emergency Information Center
- Improved Internal Communications by activation of an internal information line 2-4181 and by committing to provide Refinery updates every 30 minutes during Evacuation/SIP incidents. Training will be conducted for On Call personnel on the use of the new Refinery Information line (in service November 1, 2007)
- Additional Training for both Management On Call personnel and Chevron Fire Department Incident Commanders